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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,196

08/22/2006

Tadashi Yano

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09/09/2008

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WASHINGTON, DC 20006

EXAMINER

SPINELLA, KEVIN

ART UNIT

PAPER NUMBER

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/590,196	<b>Applicant(s)</b> YANO ET AL.	
	<b>Examiner</b> KEVIN SPINELLA	<b>Art Unit</b> 2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-28 is/are pending in the application.
- 4a) Of the above claim(s) 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/22/2006; 10/4/2007</u> .                                    | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Claims 16-27 in the reply filed on 6/27/2008 is acknowledged.

***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

3. The information disclosure statements (IDS) submitted on 8/22/2006 and 10/4/2007 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

***Drawings***

4. Figures 12 and 13 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 28B, 28C.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 105, 28c, 40, 50a. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

5. The marked up and substitute specifications filed 8/22/2006 have been entered.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: **Backlight Device Having Fluorescent Lamp Resin Cover Layer and Holder Member and Method for Manufacturing the Same.**

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 16-22 and 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Oki et al. (European Publication No.: EP 1245898 A1).

In regard to Claims 16 and 27, Oki discloses a backlight (Col. 1, line 8: “backlight”) for liquid crystal display (Col. 1, lines 8-9: “liquid crystal display devices”), comprising: a plurality (Figure 2) of fluorescent lamps 1 (Col. 5, line 52); a cover layer 3 (Col. 7, line 3) made of a first resin (Col. 7, line 3) and covering an outer periphery (Figure 2) of each of the fluorescent lamps 1 (Col. 5, line 52); and a holder member 2 (Col. 6, lines 54-55) made of a second resin (Col. 6, lines 54-55) in which the fluorescent lamps 1 (Col. 5, line 52) with the outer peripheries being covered (Figure 2) by the cover layers 3 (Col. 7, line 3) are enclosed (Figure 2, i.e. protruding holder members 2 enclose a single fluorescent lamp 1 and cover layer 3 within) so as to be juxtaposed with each other (Figure 2), wherein the fluorescent lamps 1 (Col. 5, line 52) are enclosed (Figure 2) in the holder member 2 (Col. 6, lines 54-55).

Regarding the Claim 16 recitation “so that they can be extracted from the holder member with the outer peripherals being kept covered by the cover layer,” the applicant is advised that, while the features of an apparatus may be recited either structurally or

Art Unit: 2885

functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 44 USPQ2d 1429. In addition, it has been held by the courts that apparatus claims cover what a device is, not what a device does. *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525 (Fed. Cir. 1990). In this case, the published apparatus of Oki discloses (as detailed above) all the structural limitations required to perform the recited functional language (i.e. so that the fluorescent lamps can be extracted from the holder member with the outer peripherals being kept covered by the cover layer), and therefore is considered to anticipate the fluorescent lamp apparatus

In regard to Claim 17, Oki discloses hardness of the first resin (Col. 7, line 3) is lower (i.e. silicon resin operationally required to be less hard than polycarbonate resin) than that of the second resin (Col. 6, lines 54-55).

In regard to Claim 18, Oki discloses the first resin is a gel-form resin (Col. 4, lines 18-20, i.e. hardening liquid state) and the second resin is a rigid resin (Col. 6, lines 54-55, i.e. rigid polycarbonate).

In regard to Claim 19, Oki discloses heat resistance of the first resin (Col. 7, line 3) is greater (i.e. silicon resin operationally required to have greater heat resistance than polycarbonate resin) than that of the second resin (Col. 6, lines 54-55).

Art Unit: 2885

In regard to Claim 20, Oki discloses the first resin (Col. 7, line 3) is a silicone resin (Col. 7, lines 3-4) or a fluoride resin (Col. 6, lines 49-51), and wherein the second resin (Col. 6, lines 54-55) is a polycarbonate resin (Col. 6, lines 54-55).

In regard to Claim 21, Oki discloses at least one of both ends of each of the fluorescent lamps 1 (Col. 5, line 52) is projected out (Figure 2, i.e. lengthwise) of the holder member 2 (Col. 6, lines 54-55).

In regard to Claim 22, Oki discloses a thickness (Figure 2) of the cover layer 3 (Col. 7, line 3) is uniform in an elongation direction (Figure 2) of the fluorescent lamp 1 (Col. 5, line 52).

In regard to Claim 24, Oki discloses a plurality of accommodation holes 2a (Col. 6, lines 55-56) are formed in the holder member 2 (Col. 6, lines 54-55), and wherein the fluorescent lamps 1 (Col. 5, line 52) with the outer peripheries (Figure 2) covered by the cover layers 3 (Col. 7, line 3) are enclosed (Figure 2, i.e. protruding holder members 2 enclose a single fluorescent lamp 1 and cover layer 3 within) in the holder member 2 (Col. 6, lines 54-55) by respectively being inserted (i.e. fluorescent lamp operationally required to be inserted, Col. 4, lines 18-20) into the accommodation holes 2a (Col. 6, lines 55-56) so that the cover layers 3 (Col. 7, line 3) are in close contact (Figure 2) with hole walls (Figure 2) of the accommodation holes 2a (Col. 6, lines 55-56).

Art Unit: 2885

In regard to Claim 25, Oki discloses wherein the fluorescent lamps 1 (Col. 5, line 52) are detachably (i.e. upon application of sufficient heat to liquefy silicone resin cover layer 3, fluorescent lamps are in fact detachable) inserted (Figure 2) into the accommodation holes 2a (Col. 6, lines 55-56).

In regard to Claim 26, Oki discloses the accommodation holes 2a (Col. 6, lines 55-56) are formed so as to penetrate (Figure 2) the holder member 2 (Col. 6, lines 54-55) from one side to the other side (Figure 2), and wherein the fluorescent lamps 1 (Col. 5, line 52) are inserted (i.e. fluorescent lamp operationally required to be inserted, Col. 4, lines 18-20) into the accommodation holes 2a (Col. 6, lines 55-56) so that both ends thereof (Figure 2, i.e. see implicit lower picture portion) are projected out (Figure 2) of the holder member 2 (Col. 6, lines 54-55) from the sides (Figure 2).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oki.

Although Oki lacks a diameter of a bulb of the fluorescent lamps is 4 mm or greater, and the length of the fluorescent lamps is 300 mm or greater, it would have been obvious to one of ordinary skill in the art at the time the invention was made to



Art Unit: 2885

incorporate fluorescent lamps having a bulb diameter of 4 mm or greater and a length of 300 mm or greater in order to allow for large enough fluorescent lamps compatible with the dimensions of a typical LCD backlight display for emitting substantial light, and since it has been held by the courts that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device, and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984),

### **Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Hayashi et al. (US Publication No.: 2002/0015297 A1) discloses a lighting unit, Katoh et al. (US Patent No.: 5,144,539) discloses an illumination device, Henkes (US Patent No.: 4,992,916) discloses a prismatic illuminator for flat panel display, and Hayashi et al. (US Publication No.: 2005/0179352 A1) discloses a backlight with discharge tube.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN SPINELLA whose telephone number is (571) 270-1284. The examiner can normally be reached on Monday - Friday, from 7:30 a.m. to 5:00 p.m. EST.

Art Unit: 2885

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KJS  
9/2/08

/Jong-Suk (James) Lee/  
Supervisory Patent Examiner, Art Unit 2885